

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No.: 10/022,365

wherein $D_a < D_b$ where D_a is the maximum depth of the concave edge portion and D_b is the maximum depth of the depression; and

wherein $W_a < W_b$ where W_a is the width of the concave edge portion of the end cutting edge and W_b is the maximum width of the depression.

22. (New) A cutting tool comprising:

an end cutting edge at an end of a rake face; and

a depression formed in the rake face so as to provide the cutting edge with a concave edge portion;

wherein the depression has a curved peripheral surface that is a portion of a spheroid;

wherein $D_a < D_b$ where D_a is the maximum depth of the concave edge portion and D_b is the maximum depth of the depression; and

wherein $W_a < W_b$ where W_a is the width of the concave edge portion of the end cutting edge and W_b is the maximum width of the depression.

23. (New) An indexable insert comprising:

an end cutting edge at an end of a rake face;

the end cutting edge having a concave edge portion; and

a spherical depression formed in the rake face so as to extend continuously from the concave edge portion of the end cutting edge;

wherein the spherical depression has a curved peripheral surface that is a portion of a sphere;

wherein $D_a < D_b$ where D_a is the maximum depth of the concave edge portion and D_b is the maximum depth of the depression; and

wherein $W_a < W_b$ where W_a is the width of the concave edge portion of the end cutting edge and W_b is the maximum width of the depression.

24. (New) An indexable insert comprising:

an end cutting edge at an end of a rake face;

the end cutting edge having a concave edge portion; and

a spherical depression formed in the rake face so as to extend continuously from the concave edge portion of the end cutting edge;

wherein the spherical depression has a curved peripheral surface that is a portion of a spheroid;

wherein $D_a < D_b$ where D_a is the maximum depth of the concave edge portion and D_b is the maximum depth of the depression; and

wherein $W_a < W_b$ where W_a is the width of the concave edge portion of the end cutting edge and W_b is the maximum width of the depression.
